09/650,787 Balachandran 11-16-38 page 2

Claim Amendments

1-4. Canceled.

5. (currently amended) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into data bursts, said system comprising:

means for defining a channel as a series of bursts that occur periodically every N bursts once per frame, where N is a positive integer;

means for transmitting digital information over said channel from a first station to a second station, wherein 0246/1357 interleaving is used within a multiframe consisting of a predefined number of consecutive frames, the bursts in said channel being assigned to one of even or odd frames within the multiframe so that only the one of the even or odd frames is needed for communications over said channel, the 0246/1357 interleaving providing because of a lower delay to the start of a talkspurt than 0123/4567 interleaving.

6. (currently amended) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into data bursts, said system comprising:

means for defining a channel as a series of bursts that occur periodically every N bursts once per frame, where N is a positive integer;

means for transmitting digital information over said channel from a first station to a second station, wherein 0246/1357 interleaving is used within a multiframe consisting of a predefined number of consecutive frames, the bursts in said channel being assigned to one of even or odd frames within the multiframe so that only the one of the even or odd frames is needed for communications over said channel, the 0246/1357 interleaving providing because of larger resource pools for statistical multiplexing under half duplex constraints imposed by mobile stations provided relative to 0123/4567 interleaving.

Jun 02 04 03:15p

09/650,787 Balachandran 11-16-38 page 3

7-11. Canceled.

12. (currently amended) A method for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into N data bursts where N is a positive integer, said method comprising the steps of:

interleaving bursts using 0246/1357 interleaving used within a multiframe consisting of a predefined number of consecutive frames, the bursts in one channel being assigned to one of even or odd frames within the multiframe so that only the one of the even or odd frames is needed for communications over said channel; and

transmitting the interleaved bursts from a first station to a second station.

13. Canceled.

09/650,787 Balachandran 11-16-38 page 4

14. (currently amended) A method for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into N data bursts where N is a positive integer, said method comprising the steps of:

interleaving bursts using 0246/1357 interleaving;

transmitting the interleaved bursts from a first station to a second station; The method of claim 12 further comprising:

utilizing one of even and odd numbered frames as a first channel; utilizing the other of the even and odd numbered frames as a second channel; disposing first and second control frames in the one and other of the even and odd numbered frames, respectively, so that a first station receiving the wireless time division multiplexed communications over the first channel need only decode the one of the even and odd numbered frames and a second station receiving the wireless time division multiplexed communications over the second channel need only decode the other of the even and odd numbered frames, thereby eliminating a need for a station to decode both even and odd numbered frames.